IN THE SPECIFICATION

Please amend the specification as shown below:

On page 1, paragraph 4:

"The heat release from this reaction, as calculated from heats of formation at 25°C, is approximately 790 ~~kiloJoules per g mole~~ kilojoules per mole. In a 15 to 17 percent (w/w) concentration of nickel sulphide In water slurry the temperatures could rise to in excess of 200°C within the autoclave where the normal operating temperature and pressure may be 160°C and 1200 kPa(g) respectively. In most exothermic autoclave circuits a majority of the energy is liberated in the first compartment with only smaller quantities being generated in the downstream compartments. This heat release is often employed to raise the feed slurry to the design operating temperature, However in many of these circuits the design operating temperature can be exceeded in the first compartment."

On page 2, paragraph 2:

"The flash and recycle system was first introduced by the current inventor in the mid 1980's and employs a first autoclave compartment flash via a flash tank with flash underflow return to the autoclave feed tank. The feed tank

serves a dual role; it is both an autoclave feed tank and an external extension of the autoclave's first compartment. In a well designed system, the temperature in the first compartment can be maintained at set point +2°C/-1°C. This temperature control is acceptable for both brick lined and alloy autoclaves. Some of the advantages of this system include optimal utilisation of the installed reactor volume; if required, concentration of the reactor contents through the evaporation of water flashed as steam; and the potential to use the flashed steam as an energy source elsewhere in the operation. Considered holistically, the flash and recycle process provides the autoclave designer with the maximum degrees of freedom and several process benefits. PCT/AUO2/00584 discloses a flash and recycle system particularly suited to autoclaves operating at low temperature e.g. 120°C, that uses vacuum for the flash."

On page 3,paragraph 4:

"Preferably, all of the solids fraction is returned to the autoclave. The solids fraction may be returned to any desired compartment of the autoclave. The return to the autoclave may be direct or indirect through any process upstream of the autoclave."

On page 3, paragraph 8:

"Oxygen is fed into the autoclave and mixed with the product therein using agitators to leach the value metals. Insufficient oxygen limits the leach reaction, and can affect throughput. Thus, preferably, the autoclave agitators are selected and operated such that they do not limit oxygen mass transfer within the autoclave. Instead oxygen mass transfer is preferably controlled by regulating the slurry viscosity within the autoclave using the returned solids fraction."

On page 3, paragraph 9:

"Preferably, the method includes adjusting the level of the feed tank to compensate for poor density adjustment in the vessels upstream of the feed tank. This step ensures that any out of specification leach product does not pass out of the autoclave."

On page 4, paragraph 3:

"Preferably, the flash underflow from the selected subsequent compartments is fed to a aqueous/solids separator, the aqueous fraction being fed forwards in the process."

On page 4, paragraph 6:

"At least a portion, and preferably the whole, of the aqueous fraction may be passed to an autoclave discharge

tank."

On page 5, paragraph 3:

"Preferably, the plant is arranged such that the solids fraction obtained from the separation means is fed to the autoclave via the autoclave feed tank."

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